**Amendment to the Claims**

The following listing of claims replaces all previous versions and listings of claims:

1. (Currently Amended) A nano calcium carbonate/vinyl chloride monomer dispersion composition comprising:

a vinyl chloride monomer;

nano calcium carbonate; and

a lipophilic dispersing agent, which comprises 1-30 parts by weight of nano calcium carbonate per 100 parts by weight of the vinyl chloride monomer,

wherein the nano calcium carbonate is dispersed in the vinyl chloride and the surface of nano calcium carbonate is modified by being treated with a metal salt of an organic acid; and

wherein the lipophilic dispersing agent has a homopolymer selected from the group consisting of polyolefin, polyether, polymethacrylate, polyacrylate, polyacetate, polyester and polyurethane or a copolymer thereof as a main chain, and at its side chain, ~~the lipophilic dispersing agent~~ has a functional group of phosphoric acid, carboxylic acid or its salt or ester so that it is chemically compatible with the modified surface of the nano calcium carbonate.

2. (Previously Presented) The nano calcium carbonate/vinyl chloride monomer dispersion composition of claim 1, which further comprises a polymerization initiator.

3. (Previously Presented) The nano calcium carbonate/vinyl chloride monomer dispersion composition of claim 1, which comprises 0.01-10 parts by weight of the lipophilic dispersing agent per 100 parts by weight of the vinyl chloride monomer.

4. (Previously Presented) The nano calcium carbonate/vinyl chloride monomer dispersion composition of claim 2, which comprises 0.01-10 parts by weight of a lipophilic dispersing agent and 0.01-5 parts by weight of a polymerization initiator per 100 parts by weight of the vinyl chloride monomer.

5. (Currently Amended) The nano calcium carbonate/vinyl chloride monomer dispersion of claim 1, wherein the lipophilic dispersing agent is a ~~monomer or~~ polymer compound having a molecular weight of ~~40-100,000~~ 200-100,000.

6. (Currently Amended) The nano calcium carbonate/vinyl chloride monomer dispersion composition of claim 5, wherein the salt of the phosphoric acid or the carboxylic acid is sodium, ammonium, primary, secondary, tertiary or quaternary alkyl ammonium salt, and the ester of phosphoric acid or the carboxylic acid is an ester in which at least one acidic proton of the phosphoric acid or the carboxylic acid is substituted to a functional group selected from the group consisting of $C_1$-$C_{30}$ hydrocarbons, ~~and~~ or a homopolymer selected from the group consisting of polyolefin, polyether, polymethacrylate, polyacetate, polyacrylate, polyester and polyurethane, and a copolymer thereof.

7. (Cancelled)

8. (Previously Presented) A PVC based nanocomposite resin composition prepared by adding the nano calcium carbonate/vinyl chloride monomer dispersion composition of claim 1 into an aqueous solution system comprising deionized water, a suspension stabilizer to prepare a suspension system, and then polymerizing the vinyl chloride monomer in the presence of a polymerization initiator to prepare the PVC based nanocomposite resin composition.

9. (Currently Amended) A method for preparing a PVC based nanocomposite resin composition comprising the steps of:

(a) adding nano calcium carbonate and a lipophilic dispersing agent to a vinyl chloride monomer to disperse them,

wherein the nano calcium carbonate is dispersed in the vinyl chloride and the surface of nano calcium carbonate is modified by being treated with a metal salt of an organic carboxylic acid, and wherein the lipophilic dispersing agent has a homopolymer selected from the group consisting of polyolefin, polyether, polymethacrylate, polyacrylate, polyacetate, polyester and polyurethane or a copolymer thereof as a main chain, and at its side chain, ~~the lipophilic dispersing agent has~~ a functional group of phosphoric acid, carboxylic acid or its salt or ester so that it is chemically compatible with the modified surface of the nano calcium carbonate;

(b) adding the resultant mixture system to an aqueous solution system comprising deionized water, a suspension stabilizer and a polymerization initiator to prepare a suspension system and polymerizing the suspension system at an elevated temperature to prepare a PVC based nanocomposite resin composition; and

(c) processing the PVC based nanocomposite resin composition including an impact modifier to produce extruded articles.

10. (Previously Presented) The method of claim 9, wherein the impact modifier is at least one selected from the group consisting of a methyl methacrylate-butadiene-styrene copolymer, and an acrylic impact modifier.

11. (Original) The method of claim 9, wherein each of the nano calcium carbonate and the lipophilic dispersing agent in the step (a) is comprised in 1-30 parts by weight and 0.01-10 parts by weight, respectively, per 100 parts by weight of the vinyl chloride monomer and each of the suspension stabilizer and the polymerization initiator of the step (b) is comprised in 0.01-5 parts by weight and 0.01-5 parts by weight, respectively, per 100 parts by weight of the vinyl chloride monomer and the impact modifier of the step (c) is comprised in 1-10 parts by weight per 100 parts by weight of the PVC based nanocomposite resin composition.

12. (Original) The method of claim 9, wherein the nano calcium carbonate has a particle size of at most 500 nm.

13. (Currently Amended) The method of claim 9, wherein the lipophilic dispersing agent is a ~~monomer or a~~ polymer compound having a molecular weight of ~~40-100,000~~ 200-100,000.

14. (Currently Amended) The method of claim 13, wherein the salts of the phosphoric acid or the carboxylic acid is sodium, ammonium, a primary, secondary, tertiary or quaternary alkyl ammonium salt, and the ester of phosphoric acid or the carboxylic acid is an ester in which at least one acidic proton of the phosphoric acid or the carboxylic acid is substituted to a functional group selected from the group consisting of $C_1$-$C_{30}$ hydrocarbon, ~~and~~ or a homopolymer selected from the group consisting of polyolefin, polyether, polymethacrylate, polyacrylate, polyacetate, polyester and polyurethane, and a copolymer thereof.

15. (Cancelled)

16. (Original) The method of claim 9, wherein the suspension stabilizer is at least one selected from the group consisting of vinyl acetate, cellulose and gelatin.

17. (Original) The method of claim 9, wherein the suspension stabilizer comprises: a primary suspension stabilizer comprising a polyvinyl acetate having a degree of polymerization of 500-3,000, which has been hydrolyzed to 70-98 mol%, and a modified cellulose having a degree of substitution of 1.0-3.0 and a degree of polymerization of 50-2,000; and a secondary suspension stabilizer comprising a polyvinyl acetate having a degree of polymerization of 500-3,000, which has been hydrolyzed to 10-60 mol%.

18. (Currently Amended) A method for preparing a PVC based nanocomposite resin composition comprising the steps of:

(a) adding nano calcium carbonate, a lipophilic dispersing agent and a polymerization initiator to a vinyl chloride monomer to disperse them,

wherein the nano calcium carbonate is dispersed in the vinyl chloride and the surface of nano calcium carbonate is modified by being treated with a metal salt of an organic carboxylic acid, and wherein the lipophilic dispersing agent has a homopolymer selected from the group consisting of polyolefin, polyether, polymethacrylate, polyacrylate, polyacetate, polyester and polyurethane or a copolymer thereof as a main chain, and at its side chain, ~~the lipophilic dispersing agent~~ has a functional group of phosphoric acid, carboxylic acid or its salt or ester so that it is chemically compatible with the modified surface of the nano calcium carbonate;

(b) adding the resultant mixture system to an aqueous solution system comprising deionized water and a suspension stabilizer to prepare a suspension system and performing polymerization at an elevated temperature to prepare a PVC based nanocomposite resin composition; and

(c) processing the PVC based nanocomposite resin composition including an impact modifier to produce extruded articles.

19. (Previously Presented) The method of claim 18, wherein the impact modifier is at least one selected from the group consisting of a methyl methacrylate-butadiene-styrene copolymer, and an acrylic impact modifier.

20. (Original) The method of claim 18, wherein each of the nano calcium carbonate, the lipophilic dispersing agent and the polymerization initiator of the step (a) is comprised in 1-30 parts by weight, 0.01-10 parts by weight and 0.01-5 parts by weight, respectively, per 100 parts by weight of the vinyl chloride monomer, the suspension stabilizer of the step (b) is comprised in 0.01-5 parts by weight per 100 parts by weight of the vinyl chloride monomer and the impact modifier of the step (c) is comprised in 1-10 parts by weight per 100 parts by weight of the PVC based nanocomposite resin composition.

21. (Original) The method of claim 18, wherein the nano calcium carbonate has a particle size of at most 500 nm.

22. (Currently Amended) The method of claim 18, wherein the lipophilic dispersing agent is a ~~monomer or~~ polymer compound having a molecular weight of ~~40-100,000~~ 200-100,000.

23. (Currently Amended) The method of claim 22, wherein the salts of the phosphoric acid or the carboxylic acid is sodium, ammonium, a primary, secondary, tertiary or quaternary alkyl ammonium salt, and the ester of phosphoric acid or the carboxylic acid is an ester in which at least one acidic proton of the phosphoric acid or the carboxylic acid is substituted to a functional group selected from the group consisting of $C_1$-$C_{30}$ hydrocarbon, ~~and~~ or a homopolymer selected from the group consisting of polyolefin, polyether, polymethacrylate, polyacrylate, polyacetate, polyester and polyurethane, and a copolymer thereof.

24. (Cancelled)

25. (Original) The method of claim 18, wherein the suspension stabilizer is at least one selected from the group consisting of vinyl acetate, cellulose and gelatin.

26. (Original) The method of claim 18, wherein the suspension stabilizer comprises: a primary suspension stabilizer comprising a polyvinyl acetate having a degree of polymerization of 500-3,000 and a modified cellulose having a degree of substitution of 1.0-3.0 and a degree of polymerization of 50-2,000, which has been hydrolyzed to 70-98 mol%; a secondary suspension stabilizer comprising a polyvinyl acetate having a degree of polymerization of 500-3,000, which has been hydrolyzed to 10-60 mol%.